

SKETCHES
FROM
THE HISTORY OF MEDICINE

W **E** **R** **N** **I** **S** **T** **A** **N** **D** **E** **R**



143-1900
Robertson Collection.

Bf 69- h. 25-

Spit 6
12 Oct 92

With the authors
Compliments.

SKETCHES
FROM
THE HISTORY OF MEDICINE
Ancient and Modern.

AN ORATION

DELIVERED BEFORE
THE HUNTERIAN SOCIETY,
AT THE LONDON INSTITUTION,
ON THE 13TH FEBRUARY, 1867,

BY
WM. SEDGWICK SAUNDERS, M.D.

LICENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.—VICE-PRESIDENT OF THE HUNTERIAN SOCIETY.—TREASURER TO THE NEW SYDENHAM SOCIETY.—EXAMINING PHYSICIAN TO THE EAST INDIAN —SCINDE AND DELHI—BOMBAY AND BARODA—GREAT SOUTHERN OF INDIA—CALCUTTA AND SOUTH EASTERN—AND OUDE AND ROHILKUND RAILWAY COMPANIES.—MEDICAL OFFICER TO THE CITY OF GLASGOW LIFE ASSURANCE CORPORATION AND THE METROPOLITAN FIRE BRIGADE, &c.—AUTHOR OF THE "CAUSES AND PREVENTION OF CHOLERA" AND "REPORTS ON CHOLERA IN THE CITY OF LONDON, 1866."

PRINTED AT THE REQUEST OF THE COUNCIL.

For Private Circulation.

LONDON :

PRINTED BY M. & W. COLLIS, 50, BOW LANE, CHEAPSIDE, E.C.

1868.

ORATION.

MR. PRESIDENT,

I purpose to devote the time, which your indulgence has placed at my disposal this evening, to laying before you the results of some inquiries into the origin and history of medicine and of the medical profession ; regarding the subject rather from a *social* than from a *scientific* point of view.

My scheme will introduce you to some of your old acquaintances ; not for instruction, but to remind you of those passages in their lives which may have been pressed out of your memories by the sterner realities of professional duties.

An inquiry into the origin of medicine must begin with the history of man himself, since pain and death are the inevitable conditions of his existence ; and the desire to mitigate the former, and postpone the triumphs of the latter arose from, and has kept pace with, the development of the various diseases to which time and circumstances have subjected him.

The *primal man*, we know, was created pure and

innocent, free from liability to pain, and possessed of unmixed capacity for the enjoyment of the pleasures that surrounded him; glowing with health, and with every emotion redolent of new delight. At sight of him,

Each hill gave sign of gratulation,
 Joyous the birds; fresh gales and gentle airs
 Whisper'd it to the woods; and from their wings
 Flung rose, flung odours from the spicy shrub:—

Apprehension of the miseries to which his progeny were doomed, would have marred this happiness; hence his ignorance of evil, and his belief that the felicity he enjoyed would be as permanent as it was perfect. But our business is with man in his *actual* condition; the sport of

“All maladies
 Of ghastly spasm, or racking torture, qualms
 Of heart-sick agony, all feverous kinds,
 Convulsions, epilepsies, fierce catarrhs,
 Intestine stone, and ulcer, colic pangs,
 Demoniac phrensy, moping melancholy,
 And moon-struck madness, pining atrophy,
 Marasmus and wide wasting pestilence,
 Dropsies and asthmas, and joint-racking rheums,
 And over them triumphant Death his dart
 Shook, but delayed to strike.”——

Undertaking to examine the subject *ab initio*, we must take into account the sources of our information, and as

our knowledge of every event *antecedent to the discovery of writing* must have been transmitted by oral or traditional agencies, we have to settle, in some degree, how far such evidence is worthy of credence.

According to popular belief, the Noahic flood destroyed the whole human race, with the exception of Noah and his family; who were therefore the sole depositories of the traditions of the events which had occurred between the time of Adam and themselves. The great longevity of these antediluvian fathers made this oral transmission easy; and we know, that the sons of Noah lived to see the birth of Abraham, whom, as the founder of circumcision, we claim as the first operative surgeon on record.

In dealing with dates, I adopt the commonly accepted chronology, unmoved by those refined speculations so much in favour at this time.

I begin with Moses, for whatever evidence may be urged upon us in the shape of marbles, or monuments, claiming an antiquity anterior to the advent of the Jewish law-giver, it is a positive and unimpeachable fact, that no *writings* are in existence, which in point of age reach within many centuries of the Pentateuch;

indeed, as we shall presently see, the oldest of the Greek writers are, in comparison with Moses, but as the children of yesterday.

The five books of Moses were written 1500 years before Christ. Hesiod, the father of Greek literature, flourished 500 years later; and Homer, the next in succession, nearly a century after Hesiod.

Herodotus places Homer 400 years before himself; thus bringing the “father of history,” as he is termed by Cicero, to about 500 years before the advent of our Saviour, so that the difference of date between the author of the Pentateuch and the oldest Greek historian cannot be much less than 1000 years.

I pass over the pretended antiquity of the Chinese and Parsis records: these have been disposed of very satisfactorily, and however much *fancy* may dwell upon the losses to literature inflicted by the Caliph Omar, when he destroyed the *Alexandrian library, in the year

* The library destroyed by the Caliph Omar, was situated in the temple of Serapis, and consisted of 300,000 volumes; in addition to which there existed in the Bruchion quarter of the city of Alexandria, a second collection of 400,000 books, which was accidentally lost by fire during the war with Julius Cæsar.

Alexandria, (founded 332 B.C.) stood in an intermediate position

640, a very little reflection will convince us that as these treasures, real or assumed, had been ransacked for ages, by the brightest spirits of Greece and Rome, everything worthy of note has been handed down to us.

The *learned* talk about the writings of the Assyrians, the Babylonians, and the Egyptians; but they do not produce a single scrap of tangible evidence in support of these pretensions.

It may, however, be contended, that although there are no *writings* extant, *traditional* evidence is very strong; and this establishes a high antiquity for Lycurgus, who lived 900 years before the Christian era. The more, therefore, we inquire, the stronger the proof becomes, that Moses as a lawgiver flourished 600 years before the highest claimant to our veneration on the grounds of primitiveness; and thus we are entitled to assume that the Greek legislator took much that is excellent, in the laws ascribed to him, from his Jewish predecessor.

between the east and west, and united the commerce of Europe, Aralia, and India; here came first into collision the Greek and Oriental mind; here the Septuagint translation of the Old Testament was written; and the collections formed by the ancient kings of Egypt were rapidly enriched and enlarged by the interchange of ideas with the Greek philosophers.

Lycurgus lived about the time that Shishak, king of Egypt, destroyed the temple of Solomon, and carried away many captives: it is therefore no very extravagant supposition, that the Pentateuch of Moses was known to the great lawgiver. During the peaceful reign of king Solomon, the intercourse between the Jews and the Egyptians was frequent and extensive, for the great monarch, needing the assistance of skilful artificers for the construction of the Temple at Jerusalem, broke down that barrier of exclusiveness that had previously isolated his people.

Now the *learned* of that day were seekers after wisdom wherever it was to be found; and moreover, as the fame of Solomon was co-extensive with the then existing world, so acute an observer as the *founder* of the Grecian law could not fail to use the materials which the wide spread knowledge of the Jewish kings sayings and doings had placed within his reach.

Every Jew was required to read the law, or hear it read, once a year—each individual therefore became a living depository of its truths, and, consequently, a somewhat competent teacher of those who might desire to be instructed in such matters.

Moses then comes before us as the first *writer*, and

the first *lawgiver*; and we shall now proceed to show that to these titles he added the still greater distinction of being the first *physician*, and promulgator of sanitary precautions.

At present, however, I will not further intrude upon your patience, but leaving his claims where I have placed them, pass on to the consideration of the character of the laws themselves;—and here we arrive at a body of enactments so excellent, so well adapted, not only to the requirements of a nomadic people wandering in a wild country, but to that *same* people when they subsequently became dwellers in cities, and suffered all the encumbrances of a more advanced civilization. *Moses* made laws for *all* times and for *all* communities, *general* as well as *particular*, reaching the *nation* through every individual member thereof; his rules for the preservation of health embraced the consideration of personal cleanliness enforced as a *religious* obligation in order that he might thereby enlist the unvarying co-operation of the priesthood.

In a climate incentive to animal enjoyments he placed strict barriers for the preservation of *chastity*, and decreed that matters relating to sexual intercourse should be under the surveillance of the priest; directions

were also given to the *menstruous* woman, and for her conduct during *pregnancy* and in *childbed*. The ordinance of circumcision was devised not alone for ablutionary purposes, but for *other well understood* objects conducive to purity. Further, it was directed how the man should order himself in affections of the virile organs; and more emphatically, what he was bound to observe when the terrible *leprosy* afflicted him. In such a calamity he was compelled to withdraw from his house, to be separated from society, and present himself to the priest at various periods during the progress of the disease; he was also to remain in a cheerless exclusion, where, if by chance any unwary passenger came in sight, the sufferer was commanded to cry aloud, *unclean! unclean!* When convalescence and health returned, the *priest* pronounced him cured of his leprosy, and he was then permitted to return to his home; but if the leprosy was supposed to cling to the *habitation*, *that*, too, was subjected to isolation, and in some instances to total destruction.

The *same precautions* obtain in our own times, although nearly 3400 years have elapsed since they were first insisted upon by Moses.

Thus, we are told by Dr. Thompson, an eminent

American writer on the Holy Land (where he resided many years), that lepers are everywhere regarded as unclean, and that at Jerusalem (where there is always a considerable number of them) a separate quarter in the city is assigned to them, to which they are rigidly confined. Dr. Thompson says: "I have seen them cast out of the villages where they resided, and no healthy person would touch them, eat with them, or use any of their clothes or utensils, and even the Arab tent dwellers cast them out of camp. The leper beggars stand apart, and never attempt to touch you, even as it was in the time of the Saviour, when the ten lepers stood afar off and lifted up their voice of entreaty."

The same writer furnishes us with the following graphic description, which, as coming from an eye witness, we have deemed worthy of notice:—

"Sauntering down the Jaffa road, on my way to the Holy City, I was startled by the sudden apparition of a crowd of beggars, sans eyes, sans nose, sans hair, sans everything; they held up their handless arms, unearthly sounds gurgled through throats without palates, and, in a word, I stood horrified, when, for the first time, I found myself face to face with a leper." He then goes

on to say: "For many years I have sought to get at the mystery of its origin, but neither books nor learned physicians have thrown any light upon it. I have suspected that this remorseless enemy originates in some self-propagating animalcules, and thus I can conceive the possibility of the contagion reaching the walls of a dwelling. No one has spoken with authority, as to what it proceeds from or how it is generated.

* "New born babes of leprous parents are often as pretty and healthy in appearance as other children, but the '*scab*' comes on by degrees, the hair falls off, joint after joint of the fingers and toes shrink up, the gums are absorbed, and the teeth fall out and disappear; the nose, the eyes, the palate are slowly consumed, and finally the wretched victim sinks into the earth under a disease beyond the control of medicine, which cannot even mitigate its tortures.

"To my mind there is no conceivable manifestation of Divine power more triumphantly confirmatory of Christ's divinity than the cleansing of a leper with a word." *

* The contagiousness of Leprosy was held in universal belief up to the seventeenth century, when certain writers on the subject

The initiatory rite of circumcision was, by Divine command, first performed by Abraham in the year of the world 2107, or about 1897 years before Christ:— At the age of 99 years, Abraham, together with his son Ishmael and all his dependents were circumcised.

Ishmael at this time was thirteen years old, and, as we are informed by Josephus, was the founder of the Arabian nation, who to this day do not circumcise until after the thirteenth year.

began to question the validity of a doctrine which had been handed down to them through successive ages, by all the early observers of the Jewish, Egyptian, Arabian, Grecian, and Hindoo countries, and the view then advanced has been confirmed by the report of the Committee recently appointed by the College of Physicians, who state that:—"The all but unanimous conviction of the most experienced observers in different parts of the world, is quite opposed to the belief that leprosy is *contagious* or *communicable* by *proximity* or *contact*."

On the other hand we have to consider the testimony afforded us by the shrewd and intelligent teachers of ancient times. Thus, Aretæus believed it to be as contagious as the *plague*, and like it communicable by respiration; and *Ætius*, following *Archigenes*, thought that "the air became contaminated through the effluvia of the sores." *Avicenna* believed leprosy to be contagious in the *general* sense of that term; *Avenzoar* by contact; *Haly Abbas* and *Alsaharavius* through the respiration; and *Rogerius* "*per coitum*."

[These interesting facts are taken from an able article in the *Lancet*, February 9, 1867.]

Isaac, the child of promise, the heir who was to carry on the race of the patriarch, was circumcised on the eighth day after his birth, and this, among the Hebrews, became a law, and a statute for ever.

One of the tapestries at Hampton Court, in the time of Holbein, represents the operation being performed upon Isaac, with what appears to be a knife made of stone, which was the instrument used for many ages for this purpose.

By the kindness of my friend, the Rev. William Sparrow Simpson, the learned Librarian and Minor Canon of St. Paul's Cathedral, I am enabled to show you some of these knives of stone; and further evidence of the employment of such implements will be found in Exodus 4th chapter and 25th verse, where it is written—"Then Zipporah took a sharp stone and cut off the foreskin of her son and cast it at his (Moses) feet." *

* *Pliny* tells us that the priests of *Cybele*, the mother of the gods had sharp stones with which they cut themselves in their extasies. *Catullus* says, that *Atys* emasculated himself with such an instrument.

The Rabbinical law stands thus: "we may circumcise with anything, even with a flint, with crystal (glass) or with anything that

Some writers believe that the practice of circumcision existed for ages amongst the Heathens before the time of Abraham, whilst others have not hesitated to date its origin as far back as our first fathers, asserting that Adam was taught by the angel Gabriel to satisfy an oath he had made to cut off that flesh, which after his fall had rebelled against his spirit.

Much has been written with regard to the comparative *antiquity* of this custom among the Egyptians and Ethiopians ; a point upon which the erudite Herodotus leaves us in doubt.

Circumcision of *both* sexes exists amongst the Abyssinians, Nubians, Egyptians (both ancient and modern), Hottentots, and probably many other nations. But in

cuts, *except with the sharp edge of a reed*, because the *enchanters* make use of that, or it may bring on a disease." Again we have the evidence of *Leutholf* that the Æthiopians used *stone knives* for circumcision in his time, 1581. Speaking of the *alnajah*, an Æthiopian race, he says :—" *Alnajah gens Æthiopum cultris lapideis circumcisionem peragit.*"

Mr. E. B. Tylor in his " *Researches into the Early History of Mankind*," has suggested as the probable reason why stone was used as a cutting instrument, that it was less likely to cause inflammation than either bronze or iron. And *Pliny* states that the mutilation of the priests of *Cybele* was done with a sherd of Samian ware to avoid the same danger,

Turkey, Persia, and in the South Sea Islands, and those of the Indian Seas, the practice is confined to the *male* sex. The Mohammedans adopt the rite of circumcision, and Mahomet himself was circumcised, although no mention is made of the fact in the Koran.

Doubtless, the so-called circumcision of women, as it is practised in some countries, is a modification of what *we* understand by the term, and involves structures other than the clitoris or nymphæ; and it is equally true that the custom is adopted by many races totally irrespective of any religious significance.

Sonnini de Manoncourt, a distinguished traveller and naturalist of the eighteenth century “having examined a young girl of Egyptian origin, about eight years old, found a thick, flabby, and fleshy excrescence, covered with skin, which grew above the commissure of the labia, and hung down half an inch, resembling in size and shape the caruncle pendent from the bill of a turkey cock.”

Conditions of a similar nature are said to exist among the women of the interior of Africa, and are probably due to climatic influences, but the more common forms of disease are those of simple hypertrophy of the exter-

nal parts of generation ; and it is not unreasonable to suppose that the surgical interference necessary for their removal has given rise to the general term of circumcision.

“ Simple *excision* of the *clitoris* has been practised for very many centuries by certain nations,” and I purpose quoting some interesting observations just published by Dr. T. H. Tanner, upon the subject. His first extract is from Strabo, the geographer, A.D. 21, who, in speaking of the Egyptians, says :—“ They *circumcise* the males and *excise* the females, as is the custom also among the Jews, who are of Egyptian extraction.” The custom appears to have been continued down to a recent period, and Mr. W. G. Brown,* who resided for some time at Darfour, North Africa, writing in 1779, thus alludes to it :—“ The excision of females is a peculiarity with which the northern nations are less familiar ; yet it would appear that this usage is more evidently founded on physical causes, and is more clearly a matter of convenience, than the circumcision of males, as it seems not to have been ordained by the precept of any inspired writer.”

* Travels in Africa, Egypt, and Syria, from the year 1792 to 1798, p. 347. London, 1799.

“This excision is termed in Arabic ‘*chafadh*.’ It consists of cutting off the clitoris a little before the period of puberty, or at about the age of *eight* or *nine* years.”

Again, the Nubian traveller* *Burckhardt* tells us—
 “The daughters of the Arabs *Ababde*, and *Djaafere*, who are of Arabian origin, and inhabit the western bank of the Nile from Thebes, as high as the cataracts, and generally those of all the people to the south of *Kenne* and *Esne* (as far as Sennaar) undergo circumcision, or rather *excision* (excisio-clitoridis,) at the age of from *three* to *six* years: Girls thus treated are called *mukhaeyt*.”

But perhaps the most trustworthy account of the circumcision of females in Western Africa is that given by the late Mr. W. F. Daniel, who was a distinguished member of our own profession. He tells us that “The excisive process in Western Africa is variously performed in accordance with the usages of the different districts where it is resorted to. The operation consists either of—

“1. Simple excision of the clitoris; 2. excision of

* Travels in Nubia, by the late John Lewis Burckhardt, p. 332. London, 1819.

the nymphæ; 3. excision of both nymphæ and clitoris; 4. excision of a portion of the labia pudendi, with either or all of the preceding structures.

“The history of the operation is involved in obscurity; that it was secretly inculcated as one of those gloomy rites which the female proselyte had to undergo, as a preliminary measure, prior to her initiation into those dread mythological creeds, which, in Egypt and the adjoining countries were swathed in the folds of an allegorical and almost impenetrable mysticism, is the most likely inference.” *Eventually* the progressive decay of the religious institutions, gradually led to its promulgation and practice among the masses of the people; for the *priests*, who, independent of their scientific attainments, were also well versed in medicine, might have advocated its use both in a moral and hygienic point of view, as conducive to the welfare of the female population.

I have been led into this digression by reflecting over the barbarous and unphilosophical meddling of certain practitioners of our metropolis who are, in effect, degrading our practice of surgery to the level of that of the savages we have just described, without possessing

the same claim to our consideration on the score of ignorance, barbarism, and superstition. The modern antic yclept "*clitoridectomy*" (to which I refer), is, as the "Lancet" says, "a proceeding which, if it be *useless*, is a *lamentable mistake*, and if it be *unnecessary*, a *cruel outrage*."

The next proposition we may fairly look for will be to imitate still further the customs of these Western Africans who, in certain tribes, whenever a girl shows any very strong indication of sexual feeling (before she is betrothed), at once proceed to produce an obliteration of her vagina by the intense inflammatory action set up by the forcible introduction of a mass of the "*capsicum frutescens*," or bird pepper—to my mind not one shade more inhuman or barbarous than unsex-ing a woman for ever, upon an assumption which grossly libels our female population.

The position taken by the early Christians in reference to the practice of circumcision was decidedly antagonistic, so far as any value, in a *religious* point of view, should be ascribed to it; nevertheless, their apostles and teachers permitted it to continue, at the discretion or inclination of those who chose to submit to it.

It is an interesting fact to note that the Copts, whose Christianity dates back from the persecution of Diocletian (called the era of martyrs) in 303, and the Abyssinian Christians, who also reckon from the fourth century, adopt the custom to this day, from a belief that it gives them a further chance of entering Paradise, beyond the baptism they receive as Christians. It is also singular that these sects accept several other doctrines and precepts of the Mohammedans and Jews, among whom they dwell.

The precise mode of operating upon males varies in different countries. In Madagascar three separate and distinct operations are inflicted upon the individual. In the South Sea Islands the natives simply slit up the prepuce on its dorsal aspect, and in earlier times the practice was to cut the prepuce all round the corona, avoiding the frœnum. In the Fiji Islands the instrument used is a sharp splinter of bamboo.

Upon females the process of excision is performed by aged women. In Egypt the custom is still maintained; and the women of the *Said* travel about from town to village, crying out "Circumcisor! who wants a circumcisor?" In Old Calabar, Mr. Daniel had the opportu-

nity of witnessing the operation, which is likewise performed *there* by aged females. The girl having been placed on the knees of a woman, with the legs apart, the clitoris was seized, *forceps-like*, by two pieces of bamboo or palm-sticks, and being gently drawn forth, was severed with a sharp razor.

Among the Jews the peculiar and distinctive mark of circumcision is perpetuated in our days, and without any material change of ceremonial. The *modus operandi* is as follows:—The godfather being seated, takes the child on his knees, and the operator (who may be the father of the child, if capable, or some friend of the family, or a professed expert) takes up with his fingers, or a pair of tweezers, as much of the prepuce as he intends to cut off, and, on applying the knife, says—“Blessed be Thou, O God, who hast commanded us to use circumcision.” He then sucks the blood, and spits it into a cup of wine, and having applied styptics to the wound, retakes the cup, and having blessed *it* and the child, pronounces the name of the child, and moistens his lips with the contents of the cup. Various prayers are then said, and the ceremony is concluded.

Though the modern Jews generally use a steel instru-

ment, there is this remarkable exception—that, when a male child dies before the eighth day, it is circumcised prior to burial, and this is done, not with the ordinary instrument, but with a fragment of glass or flint.

The practice extended to the Ishmaelites, and, as we have already stated, was subsequently adopted by Mahomet, so that a very large section of the human race are to this day, participators of a rite established considerably more than 3000 years ago.

The subject cannot be dismissed without noticing the fact that the Jews under their various captivities, subjugations, and persecutions, endeavoured, in some instances, to obliterate the marks of circumcision. This is abundantly proved, not only by contemporary writers, but by the evidence of Epiphanius, Celsus, Galen, Paulus Ægineta, Fallopius, and others, who have enlarged upon the means adopted for the accomplishment of this object. It is, further, a noteworthy circumstance that the Jews *entirely* suspended the practice of circumcision during the forty years of their wanderings in the wilderness.

In contemplating the sufferings of this unfortunate race, the heart sickens at the punishments which

resulted from their resistance to foreign usurpation. Unable to discern the hand of God in their humiliation, their struggles were, indeed, hopeless, but not the less heroic. Captives in Babylon, after a long and cruel servitude, they were restored only to be again scattered by the destruction of Jerusalem, under Titus. Through the varying fortunes of the Romans, no resting-place seems to have been vouchsafed to them; plundered and disgraced, the fall of Rome only eventuated, as far as *they* were concerned, in a change of masters. Ruthless persecutors tracked them through the dark ages, and what Heathenism spared, Christianity despoiled; our pious ancestors praising God when they had a chance of maltreating an Israelite.

For these reasons, and with such incentives, can we doubt that the timid amongst them would endeavour to remove the means of identity which circumcision afforded.

We have so refined away the simplicity of the patriarchal times, that it is almost necessary to apologise for alluding to the reverential awe with which all matters relating to the seed of Abraham were regarded. It was a solemn and impressive act when the Patriarch, believing that the time was come for

his son Isaac to have a wife, sent for his chief servant, and said, "Put, I pray thee, thy hand under my thigh, and swear by the Lord that thou wilt choose a wife for my son out of mine own kindred;" and the servant, with his hand on his master's genitals, took the required oath; and we all know how faithfully he performed it. Whilst this simple, but deeply significant ceremony was being enacted, the heart of the father of the faithful was doubtless filled with contemplations of the great purposes for the accomplishment of which the organs of generation were appropriately considered as the direct agents.

This mode of taking the oath is further adverted to in the 47th chapter of Genesis, when Jacob is taking his farewell of his children.

In our blind adoration of classical heathenism we undervalue the sublime and not less poetical incidents which mark the rise, progress, culmination, and decay of that people with whom our highest interests are identified. If, for instance, the Book of Job had not been written under inspiration, and had been accidentally discovered among the ruins of the *first* Babylon, our antiquarians would have regarded it as the loftiest of

epics ; and especially so if, instead of inculcating the worship of the true God, its subject had been the glorification of whatever false deity might have been in the ascendant when this most ancient poem was composed.

The prejudices of education subjugate the judgment, and the gross and sensual attributes with which the Greek poets invested their deities, are accepted with complacency, if not with admiration ; even Pope, their great panegyrist, describes their heroes thus :—

“ Gods, partial, changeful, profligate, unjust,
Whose attributes were *rage*, *revenge*, and *lust*.”

This, of course, will be set down for rank blasphemy against the canons of taste. We are exuberant in our praises of the *genius* of Homer, and not to worship his *inventive* powers is an offence of the deepest dye ; but when we are barbarous enough to critically examine this wonderful mythology, and to determine the claims to applause—say of supreme Jove—we are rather troubled by the difficulty of reconciling the ways of the first intelligence with our commonplace notions of decency. The intrigues of the father of the gods, the

artifices by which he eludes the jealousy of his wife Juno, his incestuous, and, if they were not classical, we should call them filthy debaucheries, draw largely upon our faith in the beauties of these records of high Olympus; and our admiration for the poet is sadly tainted with disgust for the images in which his creative powers are developed.

Thus much of the ceremonial laws. Of the moral law, the law of God, it becomes me not to speak; its obligations are as eternal as its author; the everlasting truths of the decalogue have been incorporated more or less into every system of religion and ethics which has been enunciated during the ages interposing between us and the period in which they were first promulgated on Mount Sinai.

In dismissing Moses and his times, I crave your particular attention to the manner in which the characters of priest and physician met in the same person. As we proceed we shall find that this junction of attributes continues through all the variations of time and circumstances. The terrors of the *unseen*, overawing the ignorant, placed them at the mercy of those daring minds which in every age have assumed the office of

interpreters of the will of the *demon*, or the behests of the benign Deity. To deal as a mediator between the threats of the terrible avenger and the awe-stricken victim of his own bewildered imagination, to avert the consequences of the threatened storm, or to turn aside any other manifestation of approaching evil is the office of the *medicine-man* of the North American Indian and the *Obeah* doctor of the African. Shrewd observers of nature, these wretched impostors monopolize the whole of the intelligence, such as it is, of the hordes of the human race upon whom the light of reason has never dawned, or has dawned in vain.

There is yet another aspect of the medical character, infinitely more agreeable and important, and the consideration of it will bring us to the times immediately preceding the days of the father of medicine. I do not propose to penetrate into the story of Esculapius and his divine origin, which probably, in an esoteric sense, merely meant that the Giver of all good had inspired him with a knowledge of the healing art; but (with a passing glance at Homer, the greatest poet of his own or any subsequent age), proceed to offer some general observations on the position which the study of medicine acquired under the tutorship of the philosophers.

The siege of Troy is supposed to have taken place about three hundred years before the *Iliad* was sung, and in that early time it appears that the cultivation of our art formed part of the general education of kings and warriors.*

Homer introduces us to Machaon the son of Escula-

* “As for Medicine, something of it must have been understood in that age, though it was so far from perfection, that, according to Celsus, (book i.) what concerned *diet* was invented long after by Hippocrates. The accidents of life make the search after remedies too indispensable a duty to be neglected at any time; accordingly, he tells us, that the Egyptians, who had many medicinal plants in their country, were all Physicians, and perhaps he might have learnt his own skill from his acquaintance with that nation.

“The state of war in which Greece lived, required a knowledge in the healing of wounds, and this might make him breed his princes, Achilles, Patroclus, Podalirius and Machaon, to the science; what Homer thus attributes to others he himself knew, and he has given us reason to believe, not slightly, for if we consider his insight into the structure of the human body, it is so nice, that he has been judged by some to have wounded his heroes with too much science; or, if we observe his cure of wounds, which are the accidents proper to an epic poem, we find him directing the surgical operations, sometimes infusing lenitives, at other times bitter powders, when the effusion of blood required astringent qualities.”--*Pope's Essay on the Character of Homer.*

pius, who, when Menelaus was treacherously wounded by Pandarus, is called to his aid :

“ When the wound appeared in sight, where struck
The stinging arrow, from the clotted blood .
He cleansed it, and applied with skilful hand
The healing ointments, which, in friendly guise,
The learned *Chiron* to his father gave.” *

Making due allowance for the debasing fable with which every great name or talent is overlaid, it is rational to suppose that Chiron, the teacher of Esculapius, was one of those shepherd philosophers, who like their Babylonian brethren absorbed all the knowledge of the times ; but Homer gives us other examples in support of this idea. Chiron was the preceptor of Achilles, and when Machaon is himself wounded, Patroclus is sent by Achilles to his assistance ; on his arrival he is urged by Eurypylus, to

“ Draw the deadly dart,
With luke-warm water wash the gore away :
With healing balm the raging smart allay,
Such as sage *Chiron*, sire of pharmacy,
Once taught Achilles, and Achilles thee.”—*Pope*.

* Lord Derby's Translation.

He also complains that

“Of two great *surgeons*, Podalirius stands
This hour surrounded by the Trojan bands,
And great *Machaon* wounded in his tent
Now wants the succour which so oft he lent.”

Then

“Patroclus cut the forky steel away,
And in his hand a bitter root he pressed,
The wound he washed and styptic juice infused,
The closing flesh that instant ceased to glow,
The wound to torture and the blood to flow.”

Machaon seems to have largely shared the goodwill of the Grecian hosts. Nestor, in his anxiety, says :—

A wise Physician skilled in wounds to heal,
Is more than *armies* to the public weal.

Military leaders in our days have no such weakness as this. Studied neglect seems to them the befitting recompense of those on whom they must necessarily rely for the health and sanitary welfare of their troops.

As we are still in the age of fable, it may not be out of place to notice with what tenacity the human mind clings to those delusions which fear engenders, and weak hopes sustain : with all our boasted enlighten-

ment, the *marvellous* and the *incredible* have more worshippers than the *real* and the *true*. Let us not wonder then, that the pure monotheism enunciated in the Holy Scriptures had so little charm for the sensuous and imaginative Greeks. Socrates, who, by the simple force of reason and philosophy had reached the very portals of the temple in which was enshrined the idea of the unity of God, in his *last hour* “sacrifices a cock to Esculapius.” The reputed offspring of an impure deity, History is unhappily more abundant in records of human folly and superstition, than in examples of purity of thought and action—simplicity is everywhere despised—facts are distorted or made subservient to sensations; for example:—It is not enough to tell us that Chiron was skilled in physic, but to suit the depraved appetites of the vulgar he is a *centaur*, and Esculapius a *god*. It is therefore with something like relief that the name of Hippocrates comes before us, for in him we have a *reality*, and in his works a remarkable record of the condition of medical science in the fifth century before Christ. He was born at Cos, a small island off the coast of Caria, not in Greece proper, in the first year of the 80th Olympiad.

Hippocrates was descended from Esculapius by his father's side, and from Hercules by his mother's, and was the son of Heraclides, a physician of the family of the Asclepiadæ, who furnish us with the very earliest instance of a body of philosophers devoting themselves to the healing art; for, although Pythagoras, who lived immediately before Hippocrates, and Democritus, who was his contemporary, were both learned physicians, yet, whatever fame they acquired, was ascribed to their powers as mental philosophers and rhetoricians.

It has been urged by way of apology for the mystery in which the philosophers shrouded their wisdom, that "science, like modesty, should cover itself with a veil to increase the charms of the treasure it conceals;" and this principle has been, throughout all ages, more generally acted upon than avowed.

The character of Hippocrates is at once a study for the physician and the moralist; the former will appreciate the astonishing evidences which his works afford, of a deep acquaintance with the whole subject of medicine, and his admiration will be increased by the remembrance that all the principles laid down by this

great and good man, were the results of his own experience.

No treatises on disease existed anterior to his time to aid him in his investigations of the phenomena of nature, although it is true that in the Asclepion or temple of Esculapius at Cos, records were kept and votive tablets preserved commemorative of cures performed, and of the remedies by which they were effected. But if the physician admires his talents, the moralist does honour to the qualities of his mind and the goodness of his heart. Benevolent and disinterested, pious towards the gods, and incorruptibly devoted to his country, he instructed his fellow-men, not by shedding maudlin tears over their follies, like Heraclides, nor by the coarse laughter of his friend Democritus, but by a calm and even walk of life, mitigating sorrow by his skill, and showing the form and beauty of virtue by his example.

His portrait of a worthy physician may well serve for his own likeness, and in its description we shall observe that the exalted principles of professional ethics therein inculcated, are as strictly applicable to our own times as they were to those which he himself enlightened

and adorned. His words are :—“The physician who is an honour to his profession, is he who has merited the public esteem by profound knowledge, long experience, consummate integrity, and irreproachable life ; who, esteeming all the wretched as equals in the eyes of the Divine Being, hastens to their assistance, speaks with mildness, listens with attention, bears with their impatience, and inspires that confidence which sometimes of itself restores life ; sensibly alive to their sufferings, carefully studies the causes and progress of the complaint ; not disconcerted by unforeseen accidents, but, in emergencies, having exhausted his own resources, holds it a duty to call in his brethren of the healing art to assist him with their advice. Having struggled with all his strength against the malady, he is happy and modest in success, and in failure congratulates himself that he has, at least, alleviated the sufferings of his patient.”

One of the great obstacles to the advancement of anatomy and physiology was the universal reverence for the dead which the Greeks and Romans shared in common with all the people of antiquity. Among the Jews, to touch a dead body exposed the offender to a

penance of seven days' exclusion and privation from the ordinary comforts of life ; and it is almost superfluous to add, that the Egyptians made this reverence a part of their religion.

He, then, who ventured on the dissection of the human body, did so at great personal risk, and for more than 600 years after the foundation of Rome, no instance is known of the existence of any public professor of anatomy. About that time Archagathus, a Greek, practised surgery in Rome ; and it appears that his use of the knife, and the actual cautery, was so abhorrent to the general feeling, that he was saluted with the opprobrious title of "Carnifex." Even in later days the learned Tertullian classed anatomists and butchers together in a philippic he pronounced against Herophilus, whom he charged with having tried experiments on the living body. He commences :—"Herophilus, the physician, or butcher, whichever you please, who to become better acquainted with men, ripped them up alive," &c. &c.

Of this same Herophilus, who appears to have been a man of humour, as well as genius, there is an excellent story told :—A certain *Diodorus*, a contemporary phi-

losopher and teacher of paradoxes, declared that there was no such thing as *motion*. “If a body *moves*,” says he, “it moves into the place where it *is*, or into the place where it *is not*; now it does not move into the place where it *is*, for what is *in* a place *remains* there, and, consequently, one cannot say that *it moves*. It also cannot move in a place where *it is not*; and therefore, it does not move at all.” This acute gentleman having dislocated his arm, begged the services of Herophilus, who, smiling, said:—“Either the bone of your arm is moved into the place where it *was*, or into the place where it *was not*; now it cannot move, according to your principles, either in one place or another, consequently it is not displaced at all.” The poor teacher of paradoxes saw that Herophilus was laughing at him, and in an agony cried out:—“Leave, I pray you, *dialectics* and *sophisms* to me, and treat me according to the laws of medicine.”

The inference that dissection was not openly allowed, will be strengthened by a short reference to the subject of the embalmment of the dead—the first mention of this custom is found in the 50th Chapter of Genesis; where, at the second verse, we read:—That “Joseph com-

manded his servants, the physicians, to embalm his father, and the physicians embalmed Israel ;” and at 26th verse of the same chapter it is written :—“ So Joseph died, being an hundred and ten years old, and they embalmed him.”

The Egyptians believed that so long as the human body could be saved from putrefaction or decay, the soul of that body continued in existence ; and from this feeling arose the custom of embalming, so common in remote ages. The embalmer was, in a certain sense, a *sacred* functionary ; nevertheless, it was the fashion to make a show of resistance, when he began his operation, in order to mark the innate horror of any, however necessary, profanation of the dead body. Herodotus relates that in Egypt the mummy embalmers made the incision in the side of the corpse with a sharp æthiopic stone. Of these stones two varieties have been found in the tombs in Egypt, both of chipped flint, and very neatly made. One kind is like a very small cleaver ; the other has more of the character of a lancet. The account given by Diodorus Siculus of the resistance offered to the embalmer is, as follows :—“ And first, the body being laid on the ground, he

who is called the scribe marks on its left side how far the incision is to be made ; then the so-called slitter (*paraschistes*) having an æthiopic stone, and cutting the flesh as far as the law allows, instantly runs off, the bystanders pursuing him, and pelting him with stones, cursing him, and, as it were, turning the horror of the deed upon him, for he who hurts a citizen is held worthy of abhorrence.”* Immediately after death the corpse was put into the hands of the embalmer, who in the presence of the friends of the deceased, made an incision into the left side, as above described, through which he extracted all the intestines, leaving the heart and kidneys ; the intestines were then washed in palm wine, and a solution of astringent gums. The *brain* was removed through the nostrils by means of a hooked instrument, contrived for the purpose, and the cavity filled with aromatic oils. The body was now anointed with spice-oils and balsamic gums (*frankincense* being prohibited), and allowed to remain for thirty days, after which it was immersed in a solution of nitre for from forty to seventy days (the latter being

* Taken from E. B. Tyler—“ Early History of Mankind,” p. 217.

the extreme limit allowed); it was then enveloped in aromatised cere-cloths, and all being ready, consigned to the coffin, on which were painted emblems indicative of the condition of the deceased. The process is said to have cost £300 of our money, and was, of course, only applicable to the rich. The fee for embalmment alone, varied from a *Talent* (which has been estimated by some as equivalent to £193 15s., and by others to £243 15s. of our present money) to a *Mina*, in value about £3 4s. 7d.

The embalmment of the middle classes was, in some degree, regulated by their means; the simplest form being, the destruction of the intestines with strong oil of tar, and after their removal soaking the body in a strong solution of nitre for a period not exceeding seventy days.

Some have ascribed the practice of embalming to the fact of the periodical inundations of the Nile rendering interment impossible at such seasons, and hence have thought that necessity had quite as much to do with the custom as the religious principle: but this idea is not well founded, for although the Nile continues to overflow, embalmings have ceased for ages.

After Hippocrates the name of Aristotle comes before us. Aristotle, the pupil and friend of the venerable Plato, whose doctrines he adopted and developed, lectured at Athens 370 years before Christ. As a physician and naturalist he was far in advance of his contemporaries, and as a mathematician and moral philosopher, his transcendent learning was, for ages, the theme of every scholar; and his "System of the Universe" adopted by the whole of the civilized world. These great qualities attracted the attention of Philip of Macedonia, who chose him as the tutor of his son Alexander (the Great). Ignorance and superstition were, however, omnipotent, and for having enunciated the doctrine of one God, and a supreme first cause, the priests of the various temples seeing their craft in danger, excited the populace, who threatened his life. Warned by the fate of Socrates, he retired to Chalcis to wear away a life embittered by personal suffering, and sorrow for the folly and ingratitude of his countrymen.

The heart's deepest feelings are roused at the remembrance of the deeds of violence perpetrated against every benefactor of mankind who has had the courage

to promulgate truths beyond the comprehension of the vulgar on the one hand, and opposed to the vested interest of established errors on the other. The fate of Aristotle is a common result, not confined to the dark ages, nor without examples amongst ourselves.

The learned Philo of Alexandria, who lived A.D. 40, has given us an interesting account of the very remarkable sect living in Egypt in his day, known as the “Therapeutæ,” or “healers.” He describes them as a confraternity who, after having received a special training in the University of Alexandria, devoted themselves to the healing art; they led a secluded, contemplative life, and laid the foundation of the monastic system. Eusebius calls them Christians, but this is not confirmed by Philo, who was a member of the sect; they were, probably, Platonists, or philosophical pagans. They ascribed their cures to prayers, fastings, and incantations, eschewed all material remedies, and medicaments, but made free use of magical rites of both forms—the leucomancy, or white magic, used in invoking the gods, and necromancy when the demons were to be propitiated or coerced. St. Luke, before his conversion, is supposed to have been a Therapeut;

and St. Paul denounces some of their errors. Of their faults we cannot judge, but we may admire the benevolence with which they devoted themselves alike to the physical and moral welfare of their fellow men—in this respect, no unworthy forerunners of Him who commanded his disciples, not only to “instruct the ignorant,” but to “heal the sick.”

We pass over three centuries to come to the time of Celsus, who, in the reign of Tiberius and the first century of our Lord, was established at Rome; where he acquired great honour and renown. To these he was fairly entitled by the extent of his learning and the especial attention he paid to surgery and medicine. His principles governed the medical world without a rival until the time of Galen, who divided the empire with him for centuries.

Celsus was the first native Roman physician whose name has been transmitted to us: the practice of medicine and surgery being, prior to his time, in the hands of eminent Greeks and Asiatics, excepting that there existed in Rome (at that period) a race of native practitioners, who belonged to the class of slaves* or

* See Notes and Letters of Pliny.

persons of low degree; and to whom were entrusted only the subordinate branches of the healing art.

The great proficiency of Celsus on the subjects of rhetoric, philosophy, military tactics, and rural economy, as mentioned by Quintilian, has induced many of our older writers to doubt whether he ever really practised medicine and surgery, or, whether, like the elder Cato, he simply studied them as a branch of general knowledge; and this scepticism has been favoured by the fact of his name being omitted by Pliny, in his "Treatise on the History of Medicine." On the other hand, no one, I think, can rise from the perusal of his celebrated work, "*De Medicina*," without being thoroughly convinced that his intimate acquaintance with the theory and practice of medicine, surgery, and pharmacy, could only have resulted from close bedside observation.

Galen was born at Pergamos, in Asia, in the second century; his learning was great, and his literary labours enormous. Having traversed Egypt and Greece, and acquired a knowledge of every science taught in the schools there, he settled in Rome. His works have been estimated at over 300 volumes—medical, phys-

ical, and metaphysical. He practised bleeding more frequently than his predecessors, but he gave very careful directions as to the conditions under which venesection should be resorted to, as well as to the quantity of blood to be taken.

Averroes, Avicenna, and other Arabian physicians held him in great veneration; and Dr. Alison says:—
“For centuries after his death his doctrines and tenets were regarded in the light of oracles, which few persons had the courage to oppose; and the authority of Galen alone was estimated at a much higher rate than that of all the medical writers combined, who flourished during a period of more than twelve centuries.”

Rome, in its decadence, was too much occupied with the intrigues and villainies of the factions by which it was ultimately destroyed, to spare any time for the culture of science. It was not until after the total disappearance of the Eastern Empire, and the hollow tranquillity which succeeded the triumphs of Mahomet, and the subsequent subjugation of Spain by the Moors, that learning reared its head in Alexandria, and the Arabian physicians came into view.

Although Greece had disappeared, even in the noon-

day of its glory, its literature never possessed more devoted admirers, nor more faithful exponents than are to be found among the Arabian philosophers, and yet what a striking contrast is exhibited in the characters of the two people. Whilst making the philosophy of Greece their own, they by no means lost their distinctiveness and individuality. The Greeks delighted in all that was brilliant and fascinating, like the beautiful scenery of Attica and Asia Minor. The Arabs were thoughtful and grave, monotonous and arid, like the deserts they inhabited. The genius of poetry illumined all the meditations of the former, and their thoughts were graceful, even in their errors; whilst the reflections of the latter were dull and melancholy, albeit they were based on truths.

A dreary night now ensues—we have no name of note until Paulus *Ægineta* in 640—but what a series of historically grand events interpose: The invasion of Europe by the Huns—Division of the Roman Empire—Taking of Rome by Alaric—Visigoths established in Spain—Saxon heptarchy begun—Conquest of Italy by Totila—Birth of Mahomet, down to the taking of Alexandria by the Arabs—Greece and Rome having

virtually disappeared; and our next author (Paulus) probably present at the burning of the great library of the Ptolemies.

Paulus Ægineta is entitled to our homage, as the author of an abridgment of the works of Galen, and many excellent treatises on medical subjects, especially on those incident to childbed, and the diseases of women; he was the first writer upon *small-pox* and *measles*, and the originator of the theory of *zymosis*, which has received so much attention of late. Paulus died about the middle of the seventh century, and with him expired the last of the Greek writers upon medicine. His labours have been thought worthy of being translated by the Sydenham Society.

Avicenna, who lived in the year 980, deserves a fuller notice than we can afford him; his works are said to present great clearness and acuteness. At the early age of eighteen he was chosen Physician to the Court of the Caliph of Bagdad, where for some offence he was imprisoned, and ultimately died. He has been called the “Hippocrates of the Arabs.”

Rhazes was contemporary with Avicenna, and has attracted the respectful attention of the lovers of

ancient medicine. His most esteemed work is a treatise on small-pox, which was translated by Dr. Mead in 1548.

I will conclude these sketches of the Arabian schoolmen with a brief notice of Averroes, the most eminent of them :—

This profound scholar was born at Cordova, in Spain, of which city his father was the alcade, about the year 1120. He was educated in Morocco, then in its glory, and in the celebrated schools there studied law, philosophy, and medicine. His admiration for Aristotle was unbounded, and his unwearied application to the examination of that great man's works, secured for him the reputation of being the ablest commentator on the Aristotelian philosophy. He rose to the dignity of a judge in Morocco, but the freedom of his opinions being in advance of the age, he was imprisoned for some years, and only released on recanting his errors; he died 1206, during the Caliphate of Almanzer.

The glories of the Moorish power now began to wane, and after repeated discomfitures in 1516, that intelligent and highly civilized people were finally expelled by Ferdinand the Catholic: the cross triumphs—the

crescent retires, and takes with it all that is admirable in arts, or humanizing in science ; the Spaniard has chased away Mahomet, and receives the Inquisition as the first-fruits of his conquest.

The war against opinion was carried on so vigorously that Copernicus, whose acute perception had discovered the errors of Aristotle's theory of heavenly bodies, was fiercely denounced. Copernicus was born in Westphalia in 1473, he studied at Cracow, where he received the degree of Doctor of Medicine ; at Bologna his piercing genius discovered that the sun was the centre of the planetary system, that the earth was a planet and revolved round the sun like other planets, and thus was first made known the true system of the universe. These discoveries being distasteful to the church, the Pope issued a sentence of excommunication ; and the great astronomer died with a heart oppressed by such unmerited persecution.

These discoveries were further pursued by another learned physician, Galileo, who was born at Pisa in 1564. He entered the university there in 1581, and prosecuted his studies with such zeal and success, that in a very few years he became Professor of Mathe-

matics. He now began his career as a teacher of the philosophy of Copernicus, and soon received unpleasant evidences that the disciple of truth must be ready to suffer. A congregation of cardinals, monks, and mathematicians of the old school, determined that his works were heretical and dangerous, and the holy inquisition sentenced him to prison. After remaining incarcerated some months he was taken before his judges, and required to renounce his errors, and with his hand upon the Gospel, to swear that they were sinful and detestable. Having performed this horrid penance, his conscience upbraided him, and as he rose from his knees, he exclaimed, "yet it does move," for which relapse he was further sentenced to perpetual imprisonment. He continued thus secluded for many years, during which time blindness, deafness, and pains in his limbs embittered his existence, and death at length, more merciful than the Holy See, released him from his trials. Newton was born in the year in which this noble martyr died.

For the edification of the worshippers of the "good old times," a few more instances of the loving kindness which prevailed may be acceptable.

The clerical sages of the University of Salamanca pronounced that the assertion of Christopher Columbus, that a continent existed beyond the seas, was blasphemous and feloniously wicked. A bishop of Salsburg expressing his belief in the existence of the antipodes was denounced by the bishop of Mentz as a dangerous heretic, and committed to the flames.

Bigotry, however, is not confined to any one creed, since we know that Calvin the reformer, a man who had suffered persecution without learning mercy, no sooner found himself invested with the power to punish the freedom of thought in which he had himself indulged, than he persecuted to death the learned physician, Michael Servetus, not for any immoral proclivity, but because he believed him to be unsound on the doctrine of the Trinity. Servetus took the degree of Doctor of Medicine at the University of Paris about the year 1535. He is the author of some medical treatises on the circulation of the blood, and also translated Ptolemy's geography; he was for some time in constant correspondence with Calvin, but as the "Odium theologicum" is the bitterest, Calvin shewed his christian charity by causing his antagonist to be consigned to the flames.

But I must hasten forward, Fallopius looms in the distance, and with him our medical celebrities come fast and numerous. Gabriel Fallopius was born at Modena about the year 1523, and was one of the great triad of anatomists in Italy who, at the close of the 16th century, laid the foundation of the modern science of anatomy. Fallopius succeeded Vesalius in the chair of anatomy and surgery at Padua in 1557. His career was brilliant but short, and he died in 1562. It should be mentioned that Fallopius shared the usual fate of great discoverers; his originality was disputed, and his learning questioned; but it has been always so, and in appreciating the works of our predecessors, we must keep in view the enormous difficulties by which every onward step, whether in art or science, is beset:

“Envy doth merit, as its shade pursue.”

truth does indeed ultimately prevail, but too frequently the heart of the discoverer is broken before the obtuseness of the mediocrities in power, by whom it is obstructed, can be overcome.

Although a little diverging from the strict chronological order, I must here introduce to you our old

acquaintance, Paracelsus ; this eccentric genius had too little virtue to be admired, and too much talent to be despised. He was born at Zurich, in Switzerland, in 1493, and was consequently contemporary with many more learned, but less celebrated men ; an unblushing and presumptuous egotist, he presents himself, in a moral point of view, as the exact antithesis of the amiable and virtuous Hippocrates. That he made some very useful discoveries must be granted to him ; he introduced the use of opium into Germany, and was the first practitioner who employed preparations of mercury, antimony, sulphur, iron, and other remedies.

Van Helmont is the most indulgent of his biographers, and Lord Bacon the most severe ; but perhaps the description given by Zimmerman comes nearest the truth—"Paracelsus burnt publicly at *Bâle* the works of Galen, Avicenna, and other eminent predecessors, because, he said, 'they knew nothing of the cabballa and magic,' which lay at the root of all medical and natural laws. He undertook to cure all diseases by the use of certain words and charms. He enjoined secrecy on his disciples, and certainly

was the first *great quack* from whom the numerous band of Charlatans have proceeded."

He has left his mantle behind him, and his descendants, with none of his brains, have largely inherited his presumption. On the occasion of his inauguration in the Chair of Medicine, he thus expresses himself:—

"Know," says he, "that my *cap* has more learning than all your professors, and my beard more experience than all your academies! I speak to you Greeks, Latins, Frenchmen, Italians, &c. &c. *You* will follow *me*, *I* shall not follow *you*. You, I say, doctors of Paris, Montpellier, Dalmatia, of Athens; you Jews, Arabs, Spaniards, English, I tell you all that nature obeys me; and if God does not deign to assist, I have yet the devil to resort to. I am king of all science, and command all the hosts of hell."

We have in this impostor the very embodiment of the true quacks of to-day; their language is indeed a little subdued, but their pretensions are as large; and, let me add, that whereas Paracelsus, in his days, had the countenance and support of many persons of rank, so in ours, there does not exist an ignorant pretender without the patronage of the great, and this patronage,

too often, in the exact ratio of his presumption and falsehood.

It must not be overlooked that this arch imposter died miserably, in poverty, induced by dissipation, and the possessor of the “elixir of immortality” breathed out his drunken soul at the age of fifty.

We have a lively picture of the state of things begotten of this man in the pages of Burton, an example in himself of the power of credulity, and a proof that great scholastic learning was by no means at variance with the wild vagaries of the times. He appears not unconscious of his peculiarities, and offers the following apology for his frequent reference to callings other than his own :—

“If any physician shall infer ‘ne sutor ultra crepidam,’ and be grieved that I have intruded into his profession, I tell him, in brief, he does the same by us :—I know many of his sect who have taken Orders in hope of a Benefice—’tis a common transaction ; and why may not a melancholy divine, who can get nothing but by *Simony*, profess *Physic*? Marsilius Ficinus was ‘semel et simul,’ a priest and physician, at once ‘sacerdos et medicus ;’ and also divers Jesuits are

at this time ‘*permissu superiorem*,’ surgeons, panders, bawds and midwives. Many poor vicars, for want of other means, are driven to turn mountebanks, quacksalvers and empirics ; and in every village have we not wizards, alchymists, barbers, goodwives, Paracelsians (as they call themselves), possessing great skill, and in such numbers that I marvel how they shall all find employment?”

Burton lived about 1576, and was consequently of the same age as our own great Hervey, of whom we shall speak presently.

Let me offer you one specimen on the subject of demoniacal possession, first introducing you to a new character, Cornelius Gemma, who was born at Louvain in 1535, and was one of the greatest scholars of his age, a professor of medicine in his native town (the chair having been conferred upon him by the great Duke of Alva, who governed the low countries), and whose writings embrace the subjects of medicine, mathematics, magic, and spiritual possession. Like Cardan, he was thought a little extreme in some views, but this one example suffices to demonstrate the evil influences of Paracelsus. Gemma, in his

second book on natural miracles, says:—"A young maid, called Katherine Gualter, a cooper's daughter, in the year 1571, had such strange passions that three men could not hold her. She purged a live eel—I myself saw and touched—a foot and a half long; she vomited twenty-four pounds of fulsome stuff of all colours twice a day for fourteen days, and after that great *balls of hair, pieces of wood, pigeons' dung, coals,* and after them *two pounds* of pure blood, and then again coals and stones (*of which some had inscriptions*) bigger than a walnut. All this I saw with horror. Physic could do no good, so she was handed over to the clergy."

Marcellus Donatus relates a story of a country fellow who had four knives in his belly, every one a span long, and indented like a saw; also a wreath of hair, and much other baggage. How they "came into his guts" he knew not.

This personal testimony of Gemma is a melancholy proof that the light of christianity, during fifteen centuries, had done but little towards the emancipation of the human mind from the trammels of superstition, for, we find Josephus, who lived A.D. 30, also favoring

us with his *personal* testimony to facts quite as marvellous, and no doubt as veracious, as those recorded by our Dutch philosopher. Yet although common sense rejects such “materials of history” where shall we look for better evidence of authenticity than is thus furnished by two men of unimpeachable integrity. The pride of enlightenment is indeed checked by the reflection that A.D. 1867 we hear of believers in “Spiritual Manifestation” not only among the vulgar but in classes of society where the yearning after the mysterious sets both reason and philosophy at defiance.

The universality of belief in the existence of demons, and their occasional possession of the bodies of men, pervades the whole course of sacred and profane history, and Josephus, in enumerating the great qualities of King Solomon, bears testimony to the power of the Jewish Monarch as an “*Exorcist* :”—After informing us that Solomon exceeded all men in knowledge of natural things, that he was familiar with every sort of tree, from the cedar to the hyssop on the wall ; that he knew the habits of every living creature, whether upon the earth, or in the seas, or in the air, and described their several attributes like a philosopher, and demon-

strated his exquisite knowledge of them ; he goes on to say :—“ God also gave him understanding to attain to skill against demons for the benefit of mankind ; for having composed incantations, whereby diseases are removed, he also left behind him certain kinds of exorcisms whereby demons may be expelled so as never to return, and this method of cure is effectual or prevails much among us to this day : for *I saw* one Eleazar, my countryman, in the presence of Vespasian and his sons, and many tribunes and other soldiers, deliver men who were seized by these demons. The cure was in this manner :—Applying to the nostrils of the demoniacs a ring, having under the seal one of those roots of which Solomon taught the virtues, he drew out the demon from the nostrils of the man who smelled to it :—The man presently falling down, the Exorcist mentioned the name of *Solomon*, and reciting the charms composed by *him*, adjured the demon never to return :—Moreover Eleazar, to satisfy all the company of his power, placed a small vessel full of water, in which feet are washed, and commanded the demon as he went out of the man to overthrow it, that all present might be sensible that he had left the man : this being done the wisdom of Solomon was manifest.”

In the seventh book of his “Wars of the Jews,” he gives us the following account of one of the roots employed by Exorcists :—“On the north side of the City of Machœrus there is a valley, in which is a place called Baaras, in which is found a plant bearing the same name : it is of a flaming colour and towards evening shines very bright : it is not easy to be gathered for it withdraws itself and does not stay unless one pours upon it the urine of a woman, or menstrous blood, and even then it is certain death to him who takes it unless he carries the root hanging down upon the hand—There is another way of getting it without danger :—They dig all round it, so that a very little bit of the root is left in the ground, then they tie a dog to it, and the dog attempting to follow him who tied it, the root is easily pulled up, but the dog dies presently, as it were, instead of the man who would get the plant, afterwards there is no danger to those who touch it. With all these dangers the root is desirable, for demons, as they are called, who are the spirits of wicked men entering into the living, and killing those who have no help, this root presently expels ; if it be only brought near to them who are diseased.”

We have already shewn how it took the devils by the nose.

Before we proceed, it may not be out of place to notice the general belief in astrology, and especially lunar influences, which prevailed at this period. Herbs and roots had their several patrons, and it was only when gathered and preserved under certain prescribed circumstances that their specific virtues were assured.

Similar superstitions are not yet extinct; even in this year of grace, 1867, we are not quite emancipated from the ignorance of the middle ages, and it is not a very unusual thing to see an advertisement in the *Times* announcing a "child's caul" for sale. These and such like absurdities,

" Though it make the unskilful laugh,
Cannot but make the judicious grieve."

Nor is this credulity confined to the illiterate classes. The dupes of St. John Long, as many of us may remember, included "potent, grave, and reverend signiors," and on his memorable trial, a certain noble lord* gave evidence that Mr. Long had extracted a

* The Earl of Shrewsbury.

piece of lead from his head. Some scoffers think it a pity that the quack, having succeeded to some extent, left so much behind.

In speaking of Harvey, it is difficult to strike out any new path in a tale that has been told so often. Yet, we may extract something out of the consideration of the times in which he lived, and the men by whom he was surrounded. He was born at Folkestone, in 1578, and commenced his travels at 19 years of age. What his previous education had been does not appear, but we find him at the age of 24 elected Doctor of Medicine at Padua—then the most famous University in the world. On his return to England he received the honour of the degree of Doctor of Medicine at Cambridge. James the First, and his son, Charles the First, favoured him with their countenance, and in 1628 he was induced to publish an account of his great discovery. As a matter of course he was at once denounced as a visionary ; personal abuse was unsparingly poured upon him ; but as the grand fact enunciated was not to be shaken, his enemies turned round and discovered that, after all, it was not new, and had been the doctrine of many eminent physicians

from the earliest days. The old, old story : the same sickening detraction—the same miserable envy rife in every age and clime. Harvey died in 1658.

Shakespeare was 14 years old when Harvey was born, and the garrulous but erudite Burton was about the same age, yet strange to say, the great poet seems to have been unknown to the men of his own generation : scholars knew nothing of poor players, and he who was born to delight and instruct the future of mankind shone with but small lustre then.

The history of medicine in England now begins, although for some time subsequently medical instruction was sought for in the schools of Italy, France and Holland. The Reformation had swept away the monastic institutions ; but during the depressing middle ages, all the learning that barbarism had spared took refuge in the cloister. The monks practised physic very extensively, and considering the ignorance and superstition of the period, it was natural that the vulgar should prefer the medical assistance of those who arrogated to themselves the immediate assistance of Heaven in the preparation of their remedies. The women were especially fond of consulting the monks :

if there be any truth in the old epigram

“To Esculapian monks the good wives roam

What marvel, they have husbands sick at home.”

The alchymists again, like their lineal descendants in our days, professed to have discovered the philosophers stone, and *universal specifics*, and they were, as they are now, believed in proportion to their presumption. The practice of medicine being chiefly engrossed by empirics and monks, the latter very readily obtained licenses from the Bishops of the various dioceses who had authority to examine candidates, without having themselves any knowledge of the subjects in question, beyond that acquired in their general education.

By the 5th Henry VIII., chap. vi., we find there were but twelve regular Surgeons practising in all London, and about the same number of Physicians.

The college of Physicians in London owes its foundation to Dr. Thomas Linacre, of All Soul's, Oxford, a man of profound learning, who had won honours at Rome, Bologna, and Florence.

Linacre, through his interest with Wolsey, a wise and liberal patron of learning, obtained, in 1518, letters patent from Henry the Eighth, constituting a corpo-

rate body of regular Physicians in London. He was elected the first president, and meetings were held at his house in Knight Ryder Street until his death. With a munificence not without many worthy imitators in our profession, as we shall presently point out, he bequeathed this house to the College.

His successor in the presidential chair was one of those bright lights who have contributed largely to the fame of medicine, in what I have already called its social and scientific aspect, and therefore deserves a passing notice. Dr. John Caius Kaye, of Gonville Hall, Cambridge, was Court Physician to Edward the Sixth, and as he retained the favour of Mary, after the demise of the pious young King, he procured from her a license to advance Gonville Hall into a *College* under the name of Gonville and Caius College, on condition of enlarging the institution at his own expense. In order to devote himself to this object, he resigned the presidency of the College of Physicians, and completed his buildings at Cambridge. The mansion of learning thus raised by his liberality, became the retreat of his old age, and having given up the dignified position of *Master*, with a disinterestedness equalled only by his

generosity, he continued to reside there as a gentleman commoner until his death in 1573.

Harvey was elected president of the College of Physicians in 1654, but excused himself on account of his age and infirmities. Such, however, was his attachment to that body (best evinced by *donationes inter vivos*), that in 1656, he made over his personal estate in perpetuity for its use, having previously (on the occasion of the College being removed from Knight Ryder Street to Amen Corner) built them a library and public hall,* which he granted for ever to the corporation, together with his own valuable collection of books and instruments. Harvey's grand result was the work of a quarter of a century of unremitting toil. An admirer wrote :—

“There didst thou trace the blood, and first behold
 What dreams mistaken sages coined of old.
 For till thy Pegasus the fountain brake,
 The crimson blood was but a crimson lake,
 Which first from thee did tyde and motion gaine,
 And veins became its channel, not its chaine.
 With *Drake* and *Ca'ndish* hence thy bays are curl'd,
 Fam'd circulator of the lesser world.”

He died in 1658.

* Now the site of Stationers' Hall.

I may here mention, that, after the fire of London, the College of Physicians was rebuilt on a site in Warwick Lane, which, until the erection there of the palatial residence of Guy of Warwick, the King maker, was called Eldenesse Lane.

Sir Christopher Wren was the architect of the new College, and its burnished dome gave Garth the opportunity of displaying his powers of satire thus—

“ Witness a dome, majestic to the sight,
And sumptuous arches bear its oval height ;
A golden globe, placed high, with artful skill,
Seems to the distant sight—a gilded pill.”

Amongst the remarkable men of Harvey’s time were Shakespeare, Bacon, Van Helmont, and Sydenham, all of whom had personal intercourse with him ; of these we shall first notice Thomas Sydenham, who was born in 1624. Boerhaave called him the second Hippocrates on account of his close observation of the natural phenomena of disease, but he is too well known to us to require any detailed description either of his method, or of his general knowledge. The story of his reply to Dr. Blackmore, when asked by him what books he should read, that “ Don Quixote was a very good book ”

has been erroneously supposed to express his contempt for learning, but the joke was a personal one. Blackmore was a poet, and Sydenham saw that the man who consulted him did not possess the stuff of which doctors are made, he therefore referred him to the most lively piece of writing then in existence, as furnishing fitter pabulum for a poet, than the dry discussions of medical subjects could afford. To describe the character of Sydenham, it would be necessary to call to our aid the highest forms of panegyric; a good and honourable man, living in harmony with his brethren, and as far as the troubled state of the country would allow, in peace with all men. He lived to see the revolution of 1688 accomplished, and his aspirations as a patriot being thus gratified, he died in the following year.

Contemporary with Sydenham, we find the celebrated Sir Wm. Petty, the founder of the Lansdowne family. He was the eldest son of Anthony Petty, who, Aubrey the Antiquary tells us, was a clothier in Romsey. In his early days he showed great liking for all mechanical operations, and at twelve years of age had acquired considerable skill in carpentry and smiths' work. Educated at the free school of his native place, at the age

of fifteen he began his remarkable career as a self-helping man ; from his own account, we learn that he went over to Caen, in Normandy, with a little stock of merchandise, and had such good success that out of the profits he educated himself in the French tongue, and perfected his knowledge of classics and mathematics. In his twentieth year he had saved about three-score pounds, and acquired as much progress in mathematics as any of his age : to his love of learning was joined the desire to acquire wealth ; he was at all times *practical*, and seems to have held pecuniary advantage to be the most comprehensive form of the practical. He tells us that when the civil wars between the King and Parliament grew hot “ I had *sixty pounds* in money and went into the Netherlands and France for three years, and vigorously pursued my studies, especially that of medicine at Utrecht, Leyden, Amsterdam, and Paris. I returned to Romsey with about *ten pounds more* than I had carried out of England.” In Paris, Petty made the acquaintance of Hobbes, who retired early from the civil wars. Hobbes soon discovered the capacity of his young friend, and read with him the *Anatomy of Vesalius*. He entered at Brazennose College, Oxford,

in April, 1648, and took his degree there as Doctor of Physic, in March, 1649. The date of his admission to the College of Physicians is 25 June, 1650. He had been previously deputy to Doctor Thomas Clayton, Professor of Anatomy at Oxford, who laboured under the singular disqualification of having an insurmountable aversion to the sight of a mangled corpse. On the resignation of Clayton in 1651, Petty became Anatomical Professor, and about the same time he succeeded Dr. Knight in the Professorship of Music in Gresham College. About the year 1645, the Royal Society was formed, and Petty was one of the earliest members of the Oxford branch.

In 1652 he was appointed Physician to the Army in Ireland, which post he retained for seven years, at a salary of twenty shillings a day, while his practice produced him £400 a year more. His first great step to wealth, however, arose from his dealings with the forfeited lands in Ireland, and in a few years he managed his financial affairs so skilfully that he acquired a rental of £18,000 a year; part of this he was dispossessed of at the Restoration, as being unfairly obtained. He, however, had still a large fortune at his command,

and bought the Earl of Arundel's house and gardens in Lothbury, and erected thereupon the buildings forming Tokenhouse Yard, which was partly destroyed by the great fire. Petty had the tact to make his peace with the new government, and became a favourite with Charles II., who knighted him, and bestowed on him the place of Surveyor General for Ireland; and it is said, by Aubrey, that he was created Earl of Kelmore, though he never assumed the title. When the College of Physicians obtained its new Charter his name was published in the list of Fellows, although he had then resigned practice. The universality of his genius is clearly shewn by the list of his published works. He was a man of a genial character and handsome person:—"If he has a mind to it," says Aubrey, "he will preach extempore, either as a Presbyterian, Independent, or as a Capucin friar, or Jesuit." As a proof of his humour, when he was challenged to fight by Sir H. Sankey, he told his opponent, that as his short sight would not allow of the usual mode of warfare, he would meet him, if he was so minded, in a dark cellar, each to have a carpenter's axe for his weapon: this the knight declined. He died in 1687

of a gangrene of the foot, and was buried at Romsey, by the side of his father and mother: there lie his remains, covered with a flat stone, on which an illiterate workman has cut these words:—" *Here layes Sir William Pety.*"

The part played by the Good-Wives and Ladies Bountiful in this age deserves a passing notice, and we will make one or two quotations from books especially devoted to their use. Thus: "To make Oil of Swallows:—Take lavender cotton, spikenut grass, ribwort, and twenty other simples, of each a handful, sage of virtue, camomiles and red roses, of each two handful, *twenty live* swallows; beat all together in a mortar, add a quart of neatsfoot oyl or May-butter, and mix. This oyl is exceeding sovereign for any broken bones, bones out of joint, or any grief of the sinews."

"The '*Usnea Humana*'* is described as a moss two

* Corroborative evidence of the esteem in which this remedy was held will be found in Macaulay's account of the death scene of Charles II.:—"All the medical men of note in London were summoned. Several of the prescriptions have been preserved; one of them is signed by fourteen doctors. The patient was bled

lines long, grown on the skulls of malefactors who have been a long time exposed to the air. This little plant is found chiefly in England and Ireland, where the bodies of men are left hanging in chains for many years after their execution. It is of a volatile astringent nature, good for bleeding of the nose, and of use internally for epilepsy." The writer adds, "I have seen in the apothecaries' shops in London these skulls exposed with the *Usnea* upon them." Then again we have a whole tribe of "holy remedies" and cabalistic charms, &c.

Hiera Picra and Solomon's seal are used to this day. The charm for burns is as follows:— "In the name of, &c. There came two angels from the East, one brought fire, the other water; I command them both: out fire!! in water!! and so I say *Amen*." This is mumbled by the charmer, and the sufferer is relieved

largely. Hot iron was applied to his head. A loathsome volatile salt, *extracted from human skulls*, was forced into his mouth."

[This volatile salt is thus described in the *Dictionares des Drogues*: Amsterdam, 1716. "L'Usnée humaine contient beaucoup de sel volatil et d'huile; elle ne bouillonne point avec les acides."]

without daring to doubt, for if he *doubts* the charm is destroyed. Warts and wens are disposed of by a similar process.

So much for the march of intellect; in its progress very much like the military goose step.

A belief in the curative power of the Royal touch over scrofulous affections continued to be universally held so late as the time of William III. Shakespeare gives us an account of it in the tragedy of Macbeth, which I have thought worth transcribing. In the 4th Act, Scene 3rd, a room in the King of England's palace:—

Enter a Doctor.

Malcolm. Comes the king forth, I pray you?

Doctor. Ay sir: There are a crew of wretched souls
That stay his cure. Their malady convinces
The great assay of art: but, at his touch,
Such sanctity hath heaven given his hand,
They presently amend. *[Exit Doctor.]*

Macduff. What's the disease he means?

Malcolm. 'Tis called the Evil:
A most miraculous work in this good king;
Which often, since my here-remain in England,
I have seen him do. How he solicits heaven,

Himself best knows : but strangely-visited people;
 All swollen and ulcerous, pitiful to the eye,
 The mere despair of surgery, he cures ;
 Hanging a golden stamp about their necks,
 Put on with holy prayers ; and 'tis spoken,
 To the *succeeding* royalty he leaves
 The healing benediction.

Macaulay gives us the following graphic account of the practice of touching for the scrofula, as performed by that *most religious* and *gracious* King Charles the Second.

“This ceremony had come down almost unaltered from the darkest of the dark ages to the time of Newton and Locke. The Stuarts frequently dispensed the healing influences in the Banqueting House. The days on which this miracle was to be wrought were fixed at sittings of the Privy Council, and were solemnly notified by the clergy in all the parish churches of the realm. When the appointed time came, several divines in full canonicals stood round the canopy of state. The surgeon of the royal household introduced the sick. A passage from the sixteenth chapter of the Gospel of St. Mark was read. When the words ‘They shall lay their hands on the sick, and they shall recover’ had

been pronounced, there was a pause, and one of the sick was brought up to the King. His Majesty stroked the ulcers and swellings, and hung round the patient's neck a white ribbon, to which was fastened a gold coin. The other sufferers were then led up in succession; and, as each was touched, the chaplain repeated the incantation, 'They shall lay their hands on the sick, and they shall recover.' Then came the epistle, prayers, antiphones and a benediction. Theologians of eminent learning, ability, and virtue gave the sanction of their authority to this mummary; and, what is stranger still, medical men of high note believed, or affected to believe, in the balsamic virtues of the royal hand. We must suppose that every surgeon who attended Charles the Second was a man of high repute for skill; and more than one of the surgeons who attended Charles the Second, has left us a solemn profession of faith in the King's miraculous power. We cannot wonder that, when men of science gravely repeated such nonsense, the vulgar should believe it. Still less can we wonder that wretches tortured by a disease over which natural remedies had no power should eagerly drink in tales of preternatural cures: for nothing is so

credulous as misery. The crowds which repaired to the palace on the days of healing were immense. Charles the Second, in the course of his reign, touched near a hundred thousand persons. The number seems to have increased or diminished as the King's popularity rose or fell.

“In 1682, he performed the rite eight thousand five hundred times. In 1684, the throng was such that six or seven of the sick were trampled to death. James, in one of his progresses, touched eight hundred persons in the choir of the Cathedral of Chester. The expense of the ceremony was little less than ten thousand pounds a year, and would have been much greater but for the vigilance of the royal surgeons, whose business it was to examine the applicants, and to distinguish those who came for the cure from those who came for the gold.” (*History of England, Vol. III., p. 478.*)

William the Third gave great offence to the nonjurors by sneering at a practice sanctioned by the highest ecclesiastical authorities; yielding to importunity, he once consented to lay his hands on a patient, but his good sense compelled him to exclaim:—“God give you better health and more wisdom, my friend.”

Shortly after the death of Sydenham came Dr. Freind, who was born in 1675. Being a man of worth and learning, he soon acquired a leading position in his profession, and having devoted himself early in life to the study of politics, he was returned to Parliament as member for Launceston, where, having warmly espoused the cause of the amiable Atterbury, he fell under the censure of Walpole, who sent him to the Tower on a charge of treason. This misfortune gave rise to one of the finest instances of devotion, on the part of his friend Mead, that has ever been recorded for the honour of human nature. Walpole was taken seriously ill, and of course sent for Mead, who at that time was the most popular physician. The doctor is reported to have addressed the minister thus :—" You are very ill, Sir Robert, and I can cure you ; but one condition is indispensable. Dr. Freind has been in prison some months, and my esteem for him is so great that I will not prescribe a single thing for you until he is set at liberty." Walpole hesitated, but Mead was resolute, and at length the tyrant gave way. Freind was released, and Mead when he paid his first visit of congratulation, took with him a considerable

sum of money, the produce of fees he had received from Freind's patients during his incarceration. Freind was a voluminous writer, and compiled a history of medicine in which he attacked some of the opinions of Leclerc, who had gone more extensively and accurately into the subject.

Next in order, we must say a few words of Dr. Mead. Richard Mead was born in 1673, at Stepney. Political troubles drove his father, who was rector of the parish, into Holland, where this future ornament of the medical profession was educated, at Utrecht, under Grævius. He continued his studies at Leyden, and travelling into Italy, took his degree of doctor at Padua. On his arrival in England, whither his fame had preceded him, the University of Oxford confirmed his title, and the College of Physicians received him with applause, as did the Royal Society (then but recently established.) He soon became the leading practitioner of the day, and in course of time Physician to George the Second. For more than half a century he attended at St. Thomas's Hospital, and is said to have suggested to Guy the foundation of the hospital known by that name. A more noble, disinterested, and generous man than Mead

never lived. His emoluments were very large, and his benevolence and hospitality kept pace with his income. It is stated that no poor applicant ever left his door unrelieved.

“Large was his bounty, and his soul sincere,
Heaven did a recompense as largely send.”

After a life of 80 years, he died full of honours, leaving his many literary labors as monuments of his talents and industry.

The reign of Queen Anne has been called the Augustan age of literature in England, and was in no less degree looked upon as the great day of medical science. Amongst the literary men we have to name Swift, Addison, Warburton, Pope, Steele, Parnell, Rowe, Gay, and others; and amongst Physicians—Freind, Mead, Radcliffe, Cheselden, Arbuthnot, Garth, &c. &c.

Radcliffe next comes under notice; he was a man cast in a rougher mould than Mead. John Radcliffe was born at Wakefield, in Yorkshire, in 1650, and educated at Oxford, where he became a Fellow of Lincoln College; after a two years residence he resigned his Fellowship and devoted himself to physic, removed to London, and settled in Bow-street, Covent Garden.

He was a man of ready wit, and great conversational powers, with much pleasantry and frankness. In 1686 he was appointed physician to Princess Anne of Denmark, and after the revolution was often consulted by William the Third; the latter on his return from Holland sent for Radcliffe, and shewing him his ankles swollen, and his body emaciated, the doctor brusquely said, “Truly I would not have your Majesty’s two legs for your three kingdoms.” This sally lost him the king’s favour, nevertheless he still prospered, and sat in Parliament for the borough of Buckingham.

In the last illness of Queen Anne, Radcliffe was sent for, but excused his attendance on account of indisposition; the Queen died the next day, and Radcliffe was greatly censured, which is said to have hastened his own death, which took place three months after.

There is a story told of his quarrel with Sir Godfrey Kneller, the celebrated painter. They were next door neighbours, and enjoyed a certain garden in common. Kneller complained that Radcliffe took no care that the door leading into this garden should be kept properly shut, and sent a snappish message to the doctor, that if he were not more mindful he would shut up the door

and keep the key. Radcliffe's answer was, "Tell Sir Godfrey Kneller he may do what he likes with the door provided he does not paint it." Kneller retorted to this sarcasm, "Tell the doctor I will take anything from him except his physic."

I cannot find that Radcliffe ever published any work; but at his death he left the munificent sum of £40,000 to the University of Oxford for the formation of a public library of medical and philosophical science, and a further considerable sum to provide for an annual augmentation of books and instruments. Garth, in allusion to this bequest, remarked that for Radcliffe to found a library was as if an Eunuch should establish a Seraglio.

Samuel Garth was among the celebrities of this time: the correspondent of Bolingbroke, the friend of Swift and Addison, and the patron of Pope, he must have possessed great merit to have reached such a position. He was born of a good family in Yorkshire: the date of his birth I have been unable to discover, but he was admitted a Fellow of the College of Physicians in 1693. Johnson classes him with the English Poets, and in his description of him says, "He is always mentioned

as a man of benevolence, and it is just to suppose that his desire to help the helpless disposed him with so much zeal to undertake the founding of a dispensary:— Whether physicians have, as Temple says, *more* learning than the other faculties I will not stay to inquire, but I believe every man has found in physicians great liberality and dignity of sentiment, very prompt effusion of benevolence, and willingness to exert a lucrative art, where there is no hope of lucre.”

Garth was an active and zealous Whig, and consequently familiarly known to all the great men of that party; his orthodoxy was questioned, but it was the fashion of the times to be a free thinker. Pope apostrophises him in his second pastoral—

“Accept, O! Garth, the muses early lays,
That add this wreath of ivy to thy bays.”

And again, in conjunction with Arbuthnot, in “the Farewell to London”—

“Farewell Arbuthnot’s raillery
On every learned sot,
And Garth the best good Christian he
Although he knows it not.”

Pope's favourite physician was Dr. John Arbuthnot, and never was grateful affection better bestowed. He was the son of an Episcopal clergyman in Scotland, born in 1675, and went through a course of academical studies at Aberdeen, where he also took the degree of Doctor of Physic. On his arrival in London he supported himself as a teacher of mathematics, in which he was a great proficient, and became known to the world of letters by his examination of Dr. Woodward's "Account of the Deluge," and by an able treatise on the "Advantages of Mathematical Learning." The first book of the memoirs of "Martinus Scriblerus" has also been attributed to him. An accident introduced him to Prince George of Denmark, and led the way to his appointment as Physician to Queen Anne; he retained the favour of the Court until the death of the Queen, when, being more than suspected of Jacobite proclivities, he was compelled to leave his quarters in St. James's Palace, and retired to a small house in Dover Street.

Pope dedicated to him the prologue to his satires, and thus gracefully mentions him :—

" Friend to my life (which did not you prolong,
The world had wanted many an idle song.")

The concluding stanzas are so full of tenderness that I venture to give them :—

“ Oh ! friend, may each domestic bliss be thine,
 Be no unpleasing melancholy mine,
 Me, let the tender office long engage
 To rock the cradle of reposing age,
 With lenient arts extend a mother's breath,
 Make langour smile and smooth the bed of death.
 Explore the thought, explain the asking eye,
 And keep a while one parent from the sky !
 On cares like these, if length of days attend,
 May Heaven, to bless those days, preserve my friend,
 Preserve him social, cheerful, and serene,
 And just as rich as when he served a Queen.”

About the time of his preferment he made the acquaintance of the great luminaries of art and learning, particularly Swift, (the mad parson as he was first designated) Pope, Gay, Parnell, Atterbury, Congreve, &c., and greatly assisted, with his ready and witty pen, the ambitious Bolingbroke.

What is greatly to his honour, in the midst of an age of scoffers, he retained a deep sense of the importance of personal religion, and seems to have lived in the

affectionate esteem and remembrance of his friends; Swift said of him, "Oh! if the world had a dozen Arbuthnots in it, I would burn my travels" (Gulliver's); and on another occasion expresses himself thus, "Arbuthnot has more wit than all we have, and his humanity is equal to his wit."

For some time before his death he suffered from asthma and dropsy, and bore his affliction with characteristic fortitude and resignation. He died in 1734, leaving a son, who was one of Pope's executors, and two daughters.

Next to the illustrious Scotchman whom we have just dismissed, comes a very worthy native of the Emerald Isle — Hans Sloane, the son of Alexander Sloane, the head of a colony of Scotchmen, who, in the reign of James I. settled in the north of Ireland. Hans was born at Killileagh, in the year 1660. He very early showed a liking for Natural History, and on his arrival in London attended lectures on Anatomy, Botany, and their kindred sciences, and formed a close intimacy with Boyle and Ray. After four years study he visited Paris and Montpellier, in which places he took his degrees in Medicine. In 1684 he returned

to London and commenced practice, being a Fellow of the Royal Society and of the College of Physicians. On the appointment of the Duke of Albemarle to the government of Jamaica he accompanied that nobleman, and thus acquired a rich addition to his Museum of Natural History. George the First created him a Baronet, and on the death of Sir Isaac Newton, he became President of the Royal Society—estimable as a man, and eminent in science, he lived to a great age, and at his decease, bequeathed his museum to the nation, conditionally on the sum of £20,000 being paid to his executors for the benefit of his survivors: this sum bore no proportion to the value of his collection, and as it laid the foundation of the British Museum, it must ever be regarded as a patriotic and generous act.

A curious illustration of the observant mind of Sir H. Sloane is furnished by the fact of his having noticed that the natives of the West Indian Islands, who eat much of the green fat of the turtle, perspired a yellow oil; the explanation being that the true green fat of the turtle is a green-coloured cellular tissue enclosing a yellow oil, which passes through the system undigested. The anatomical data on which this statement is ad-

vanced have been, at a comparatively recent period, verified by actual experiments performed by the late Dr. Pereira, assisted by our much esteemed former President, Dr. Daldy. It occurred to my mind that this fact in dietetics might present a lesson of caution to an audience peculiarly exposed, as citizens of London, to the temptation of eating a material, which, however appetising, is incapable of healthy assimilation.

In a sketch of such limited pretension we are compelled to pass over names well deserving a niche in the temple of Esculapius:—every letter of the alphabet furnishes its contingent. To many of the men, into whose labours we have here entered, the civilised world is indebted for their contributions to general literature, as well as to the science of medicine; and in our endeavour to chronicle their importance, we can never cease to admire the fertility of their talents, and the extent of their industry in bringing to light so much useful knowledge out of the scanty materials by which their enquiries were aided:—Akenside, Bacon, Boyle, Blackmore, Cheselden, Darwin, Petty, Ray, among others, may be noted as examples.

We have now reached the period at which legitimate medicine was established in this country; and as my discourse has already exceeded the assigned limits, it remains only to record our solemn tribute of the affectionate remembrance we all entertain towards those members of our society whose faces we shall so sadly miss in our next sessional meetings. Constituted as our cherished society is, as a friendly gathering of kindred spirits, actuated by mutual necessities, meeting as brothers, knowing no rivalry but the desire to impart, each to other, the results of our matured experience, it is with more than ordinary grief that we bow submissively when Providence sees fit to lessen our numbers by death.

But it is not we alone who have sustained a loss. The name of Barlow will live for ages to come as the type of the scientific physician of the nineteenth century. A man of cultivated intellect, of elegant mind and blameless life, of calm judgment and exalted feeling, I look upon his death as nothing less than a calamity to the whole medical profession.

Too soon, alas! after him, we were shocked by the almost sudden removal of the accomplished and genial

Jeaffreson, endeared to his brethren by those solid endowments which mark and govern the high minded practitioner and amiable gentleman—no less than to the public by those qualities that are inherent in a warm, kindly, and generous nature. And, what then shall we say of our dear friend, Henry Blenkarne, so recently carried to his rest. Who can ever forget his pure and simple nature, his spotless life, and those endearing virtues which attached him so closely to all whose privilege it was to enjoy his friendship—one of Nature's gentlemen, delicate and considerate of the feelings of others, generous to the poor at the sacrifice of his valuable life, ready at all seasons to give his time for the promotion of any and every benevolent scheme in connexion with our calling; we shall long mourn over the good old man. As I stood by and saw his remains committed to the ground but the other day, my mind reverted to the other honoured members I have mentioned, and I felt that one and all had realized and fulfilled to the letter the following monition of Bacon :—

“I hold every man a debtor to his profession, from the which as men of course do seek to receive counte-

nance and profit, so ought they of duty to endeavour themselves, by way of amends, to be a help and ornament thereunto.”

I now beg permission to draw the curtain. I have laid before you, with but little skill, some rapid sketches of our illustrious predecessors. I have shown how worthily they have fulfilled their mission; and, having approached the advent of that great man, to whose memory we dedicate this evening, I make my bow and retire, first thanking you for the attention you have accorded to my dull recital. I pause now because I can add nothing to your knowledge of the character and labours of John Hunter. His patience under such difficulties as would have destroyed an ordinary worker, and his sublime indifference to personal comfort and advantage when the interest of that science, which he so well loved was in question—are “familiar in your ears as household words.”

But, whilst we honour him by these periodical meetings, and by the discussion of subjects the elaboration of which formed the happiness of his life, it is only in the great museum, founded by his energy, that the grandeur of his character can be felt.

In that hallowed path, in which he delighted to tread, the mantle of his genius has fallen upon one who, with a kindred love, aided by the marvellous instinct of his own original mind, still follows out the investigations of the great author, adding each day something to the knowlege which went before, and still turning over some new page of the book of Nature, wherein the finger of God has written, in characters hitherto undeciphered, fresh evidences of His glorious infinity. Under the auspices of our honorary member, Professor Owen, we gaze and admire.

THE END.



